

WHAT IS CLAIMED IS:

1. A modem for a Digital Subscriber Line (DSL) employing Time-Division Multiplexing (TDM) protocol comprising:

    a line driver having inputs for receiving a transmit signal and outputs for connection to a twisted pair line;

    means for connecting the twisted pair line to a receiver;

    load resistors coupled intermediate the line driver outputs and the receiver connecting means;

    means for terminating the load resistors in a low noise termination responsive to a switching signal; and

    means for generating the switching signal.

2. A modem for a DSL as defined in claim 1 wherein the means for terminating the load resistors comprises a means for driving the line driver outputs into saturation.

3. A modem for a DSL as defined in claim 2 wherein the means for driving the line driver outputs into saturation comprises:

    a first transistor having its drain connected to a first input of the line driver and its emitter connected to ground and its gate connected to the means for generating the switching signal;

    a second transistor having its drain connected to a second input of the line driver and its emitter connected to ground and its gate connected to the means for generating the switching signal; and

    means for isolating the inputs of the line driver.

4. A modem for a DSL as defined in claim 1 wherein the means for terminating the load resistors comprises:

    a balancing impedance interruptibly connected across the load resistors;

    a switch responsive to the means for generating the switching signal for interrupting the circuit across the balancing impedance.

5. A modem for a DSL as defined in claim 1 wherein the means for generating the switching signal is a timing logic synchronous with a receive time slot of the TDM protocol.